

*U. excavata* vs. *satur*. These two are the same species!

*U. satur* is not, strictly speaking, a variety of *ventricosa*, but because of priority it is a good species, and *excavata* becomes a synonym!

*U. claibornensis* vs. *hydiana*. The greatest difference existing here is the lack of rays in *claibornensis*.

*U. beadleana*,  
*U. chickasawensis* } vs. *Askewii*. These three species are identical, the varietal differences being no more than the different habitats should demand.

*Proptera inflata* vs. *amphichæna*. A suspicious piece of evidence is to be noted in the fact that where one of these species is found, there is a lack of *P. lævissima*!

However, *amphichæna* has no wing, even when young and perfect.

*U. refulgens* and *sphæricus*. These two species are identical and form a well-marked subspecies characterized by purple nacre.

*U. ebenus* and *crassidens* do not grow in the Sabine.

*Margaritana complanata* is by this find considerably extended down South. They were gravid when taken in November.

---

#### PLANORBIS BICARINATUS AND PLEURODONTE ANGULATA.

BY E. G. VANATTA.

---

Some recent studies have shown that the nomenclature of these species is somewhat intricate, and an examination into their history proves that the names in current use cannot be held.

The records bearing on the question follow.

PLANORBIS BICARINATUS Lamarck.

In the Ann. du Mus. Hist. Nat. Paris V, p. 36, 1804, Lamarck describes a fossil under the name *Planorbis bicarinata*, which was figured on plate 62, fig. 3 of the Annales du Muséum viii, 1806. It was also described in Animaux sans Vertèbres Supp., vii, p. 542, 1822. Deshayes in the Anim. s. Vert. Bassin, Paris, ii, p. 438, 1864, placed this species in *Adeorbis*.

PLANORBIS BICARINATUS Say (not Lam.)

In the Third American Edition of Nicholson's British Encyclopedia, Philadelphia, 1819, Conchology, pl. 1, f. 4, Say, described

*Planorbis bicarinatus* from the Delaware River. Sowerby, in *The Genera of Shells*, *Planorbis* f. 4, Mar. 30, 1822, named and figured this shell again as *Planorbis bicarinatus*. Amos Eaton in the *Zool. Text-book*, p. 194, 1826, redescribes Say's species of *Planorbis* under the generic name *Helix*, but his *Helix bicarinatus* has nothing to do with *Helix bicarinata* Sowb., *Zool. Jour.*, 1825, p. 58, pl. 3, f. 7.

HELIX ANGULATA Rackett (not Burrow.)

*Helix angulata* Rack., *Trans. Linn. Soc. London*, xiii, p. 42, pl. 5, f. 1 (read June 1, 1819, published before 1821), was based on specimens of *Planorbis* from Lake Huron, Canada. But this name is preoccupied by *Helix angulata* Burrow, in the *Elements of Conchology*, by Rev. E. I. Burrow, London, 1815, pl. 26, f. 1, which is *Pleurodonte acutangula* Burr. This name was also supposed to be preoccupied, but *Planorbe anguleux* Brard, *Ann. du Mus. Hist. Nat.* xiv, p. 435, pl. 27, f. 23, 24, 1809, was not Latinized by him. It is merely a French name for another shell.

PLANORBIS ANTROSUS Conrad.

Described in *American Journal of Science and Arts*, New Haven, xxv, pt. 2, p. 343, Jan. 1, 1834, from Randon's creek near Claiborne, Alabama, is therefore the first name which can be used for the freshwater shell generally known as *Planorbis bicarinatus* Say. The next name is *Planorbis engonatus* Conrad, *New Fresh Water Shells of the United States*, Appendix, p. 8, pl. ix, f. 8, Oct., 1835, based upon the same species of shell from Albany, New York. *Planorbis angistoma* Hald. *Monogr. Fresh Water Moll. U. S.*, no. 7, *Planorbis*, p. 7, Jan. 1, 1844, is according to Mr. Walker, *Nautilus*, xxiii, p. 5, probably typical *antrosus*. If this is a distinct form Conrad's name is earlier.

PLANORBIS BICARINATUS MAJOR Beck.

H. Beck in the *Index Moll.*, p. 118, 1837, lists the name *Planorbis bicarinatus* Say, and divides it into two forms: *a. major*, from the Schuylkill River and refers to Sowb. *Genera*, iv, f. 4. (Mr. E. R. Sykes in the *Proc. Mal. Soc. London*, vii, p. 194, Sept., 1906, states that part iv, of Sowb. *Genera* was published on March 30, 1822), and to Wood, *Index Test. Suppl.* vii, 12, *Planorbis angulatus* Wood.

*b. minor*, New Jersey, citing with a question *Planorbis eburneus* Chemn., ix, 1123? from the West Indies, as a synonym.

As Sowerby's and Wood's names both refer to the typical form of *bicarinatus* Say, as defined in Mr. Walker's excellent paper (*Nautilus*, xxiii p. 1. & p. 21, 1909), the name *major* Beck becomes synonymous with that form.

The form described by Mr. Walker on p. 5, of the *Nautilus* xxiii 1909 should be written *corrugatus* 'Curr.' Wkr.

**PLEURODONTE ACUTANGULA** Burrow.

Burrow's name for the shell generally known as *Pleurodonte angulata* Fér. from Porto Rico, should be used. Part of the synonymy is given below. Pfr. (*Monogr.* I, p. 197, 1908) thought Burrow's shell was *Helicostyla papyracea* Brod., a mistake which was perpetuated in *Manual of Conchology*, ix, p. 219.

*Helix acutangula* Rev. E. I. Burrow, *Elements of Conchology*, London, 1815, pp. 183 and 248. Beck. *Index Moll.* 1837, p. 45, No. 6, Pilsbry, *Manual Conch.* ix, 1894, pp. 99 and 219.

*Helix angulata* Burrow, *Elem. of Conch.* 1815, pl. 26, f. i.; Fér., *Hist. Nat. Moll.* I, pl. 61, f. 2, (published after 1821 and before 1825). Gray, *Ann. Philos.* London, n. s. ix, p. 412, 1825. Pfr., *Monogr.* I, p. 297, 1848. Desh. in Fér., *Hist. Nat. Moll.* I, p. 343, 1850.

For the rest of the synonymy see Fér., *Hist. Nat. Moll.* I, p. 343 and Pilsbry, *Man. Conch.* ix, 1894, p. 99.

*Helix angulata* Fér., *Tabl. Syst. Anim. Moll.*, *Prodrome Gen.*, 1821, p. 36, is a nude name.

---

**NOTES ON SOME PLIOCENE FOSSILS FROM GEORGIA WITH DESCRIPTIONS OF NEW SPECIES.**

BY T. H. ALDRICH.

(Concluded from page 132.)

10. POTAMIDES CANCELLOIDES n. sp. Pl. 8, figs. 2, 2a.

Shell small, whorls about seven or eight, first two smooth, the next three convex and cancellated, the transverse lines strongly raised, generally two in number and nodulous at the intersections.

Body whorl in both specimens carrying four or more transverse lines. Aperture ovate-elongate; canal short twisted.

Length of No. 2a,  $3\frac{1}{2}$  mm. Fully grown example is at least 15 mm.